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| EXAMINER | |
| MILIA, MARK R | |
| ARTIBUT | D MIN (DED |
| ART UNIT PAPE | R NUMBER |
| 2622 | |
| | MILIA, MARK R ART UNIT PAPE |

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary Examiner |
|---|
| Mark R. Milia The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
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| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
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| 2a) ☐ This action is FINAL. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
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| |
| Disposition of Claims |
| 4)⊠ Claim(s) <u>1-9</u> is/are pending in the application. |
| 4a) Of the above claim(s) is/are withdrawn from consideration. |
| 5) Claim(s) is/are allowed. |
| 6) Claim(s) <u>1-9</u> is/are rejected. |
| 7) Claim(s) is/are objected to. |
| 8) Claim(s) are subject to restriction and/or election requirement. |
| Application Papers |
| 9)☐ The specification is objected to by the Examiner. |
| .10)⊠ The drawing(s) filed on <u>04 April 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |
| Priority under 35 U.S.C. § 119 |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: |
| 1. Certified copies of the priority documents have been received. |
| 2. Certified copies of the priority documents have been received in Application No. |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. |
| See the attached detailed Office action for a list of the certified copies not received. |
| |
| Attachment(s) |
| 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) A) Interview Summary (PTO-413) Paper No(s)/Mail Date |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/2/01. 5) Notice of Informal Patent Application (PTO-152) 6) Other: |

Art Unit: 2622

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5535368 to Ho et al.

Regarding claim 1, Ho discloses a memory board comprising a printed wiring board having a connector terminal (see column 1 lines 19-23 and column 3 lines 10-20), a memory device mounted on the printed wiring board and storing data used by an apparatus to which the printed wiring board is attached (see column 3 lines 29-34 and 54-64), and a memory controller mediating data communication between the apparatus and the memory device (see column 3 lines 47-51), wherein the memory controller is a programmable device where the content of the mediation is changeable (see column 3 lines 40-51, column 4 lines 5-60, and column 5 lines 5-8).

Regarding claim 4, Ho discloses an image forming apparatus comprising: a memory board (see column 1 lines 19-23, column 2 lines 15-21, and column 3 lines 10-20), a connector for attaching the memory board (see column 3 lines 29-34), and a controller accessing the attached memory board to perform a control associated with image formation (see column 3 lines 47-50), wherein the memory board, which is

Art Unit: 2622

connected to the connector, comprises a printed wiring board having a connector terminal, a memory device mounted on the printed wiring board, and storing data used by an apparatus to which the printed wiring board is attached, and a memory controller mediating data communication between the apparatus and the memory device, and being a programmable device where the content of the mediation is changeable (see column 3 lines 40-64, column 4 lines 5-60, and column 5 lines 5-8).

Regarding claim 7, Ho discloses a memory board comprising: a printed wiring board having a connector terminal (see column 1 lines 19-23 and column 3 lines 10-20), a memory device mounted on the printed wiring board, and storing data used by an apparatus to which the printed wiring board is attached (see column 3 lines 29-34 and 54-64), and a memory controller converting a control for the memory device transmitted from the apparatus into a control compatible with the kind of the memory device (see column 3 lines 40-51).

Regarding claims 2 and 5, Ho discloses the system discussed in claims 1 and 4, and further discloses wherein the memory controller converts a control sent from the apparatus into a control compatible with the kind of the memory device (see column 3 lines 40-51).

Regarding claims 3 and 9, Ho discloses the system discussed in claims 1 and 7, and further discloses wherein the memory controller stores a setting information relevant to the memory device and mediates data communication according to the setting information (see column 3 lines 47-51 and column 4 lines 20-32 and 39-46).

Art Unit: 2622

Regarding claim 6, Ho discloses the system discussed in claim 4, and further discloses wherein the memory controller is programmed by the controller of the image forming apparatus (see column 3 lines 40-51).

Regarding claim 8, Ho discloses the system discussed in claim 7, and further discloses wherein the memory controller is a programmable device where the content of the conversion is changeable (see column 3 lines 40-50).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show state of the art refer to U.S. Patent numbers 6070217 (Connolly et al.), 6047343 (Olarig), 5414800 (Kawaguchi), 5499110 (Hosogai), 5550958 (Hattori), 5754557 (Andrewartha), 5974514 (Andrewartha et al.), 6175891 (Norman), 6182253 (Lawrence), 6229227 (Muthukumaraswamy et al.), 6345348 (Watanabe et al.), and 6587909 (Olarig et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (703) 305-1900. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (703) 305-4712. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia Examiner Art Unit 2622

MRM

JOSEPH R. POKRZYWA EXAMINER

ART UNIT 2622

SUPERMISORY PATENT EXAMINER